Amendments to the Claims:

1. (Original) A system for maintaining zonal isolation in a wellbore, characterized in that said system comprises, at a specific location along said wellbore, a sealing element, said sealing element being able to deform both during and after placement and wherein the sealing element is maintained under compression after completion of the placement.

2. (Original) The system of claim 1, wherein the sealing element is connected to a fluid communication element designed to pressurize at least part of the sealing element.

3. (Original) The system of claim 1, wherein the sealing element is confined in a volume surrounded by materials of high Young's modulus.

4. (Original) The system of claim 1, wherein the sealing element comprises a sealing material in a solid state.

5. (Original) The system of claim 1, wherein the sealing material approximates the behaviour of an elastic solid.

6. (Original) The system of claim 1, wherein the sealing element comprises a sealing material in a liquid state.

7. (Currently Amended) The system of claim 1, wherein the sealing element comprises a sealing material, said sealing material being a yield stress fluid.

8. (Currently Amended) The system of claim 7, wherein the yield stress value of the sealing material is ~~high~~, greater than 10 Pa ~~and, preferably, greater than 600 Pa~~.

9. (Original) The system of claim 1, wherein the sealing material is visco-plastic.

10. (Original) The system of claim 1, wherein the sealing material is visco-elastic.

11. (Original) The system of claim 1, wherein the sealing element is composite and comprises a first material and a second material.

12. (Original) The system of claim 11, wherein the first material forms a continuous phase.

13. (Original) The system of claim 1, wherein the sealing element comprises an inflatable membrane.

14. (Original) The system of claim 1, wherein the sealing element comprises a sealing material, which has a Young's modulus below 1000 MPa.

15. (Original) The system of claim 1, wherein the sealing element is able to deform elastically for an extended period of time after placement.

16. (Currently Amended) The system of claim 1, wherein the sealing element is able to deform for more than 7 days ~~or more than one month~~ after placement.

17. (Original) The system of claim 1, wherein the sealing element is designed to deform for the planned life time of the well.

18. (Currently Amended) The system of ~~one of the above claims~~ claim 1, wherein formation surrounding the wellbore comprises at least a first layer and a second layer, said first layer being essentially impermeable and said second layer being permeable and wherein the sealing element is at least partially placed adjacent to the first layer.

19. (Original) The system of claim 1, wherein the sealing element is a sealing ring, said sealing ring being placed in an annulus between well tubing and formation surrounding the wellbore.

20. (Currently Amended) The system of ~~claims~~ claim 3, wherein the sealing element is a sealing ring, said sealing ring being placed in an volume formed by well tubing formation surrounding the wellbore and cement injected into the wellbore.

21. (Currently Amended) The system of claim 20, wherein the cement sheath comprises a first sheath portion and a second sheath portion and wherein the sealing ring is contained between and contacts said first sheath portion and said second sheath portion.

22. (Currently Amended) The system of ~~one of claims~~ claim 20 ~~or 21~~, wherein the cement sheath comprises material that expands after placement.

23. (Currently Amended) The system of ~~one of claims~~ claim 19 ~~to 22~~, wherein the well tubing is expandable and the sealing element is fixed on the outside of said expandable well tubing.

24. (Original) The system of claim 1, wherein the average height of the sealing element, measured along the wellbore axis, is less than approximately 150 m.

25. (Original) The system of claim 24, wherein the average height of the sealing element, measured along the wellbore axis, is less than approximately 60 m.

26. (Original) The system of claim 25, wherein the average height of the sealing element, measured along the wellbore axis, is comprised between approximately 1 m and approximately 30 m.

27. (Original) The system of claim 1, wherein the sealing element comprises a sealing material, which is sufficiently fluid prior to placement to be pumped or injected at a specific downhole location.

28. (Original) The system of claim 27, wherein said sealing material sets under pressure.

29. (Currently Amended) The system of ~~one of claims~~ claim 27 ~~or 28~~, wherein said sealing material expands during solidification or gelation.

30. (Original) The system of claim 3, wherein the sealing material is maintained under compression by cement sheath portions.

31. (Original) The system of claim 3, wherein the sealing element is compressed by expanded parts of a well tube.

32. (Original) The system of claim 3, wherein the sealing element consists of a chemical compound that homogenously fills the volume.

33. (Original) The system of claim 2, wherein compression results from the hydrostatic pressure of the liquid/yield fluid that forms the sealing material.

34. (Original) The system of claim 2, wherein the sealing element is connected to one or more supply lines adapted to supply pressurizing fluid after placement.

35. (Original) The system of claim 1, wherein the sealing element comprises an elastic tube adapted to make a sealing contact with the formation.

36. (Original) A method of maintaining zonal isolation in a wellbore, characterized in that it comprises the following steps:

placing a sealing element at a specific location along said wellbore;

allowing said sealing element to be able to deform both during and after placement; and

maintaining the sealing element under compression after completion of the placement.

37. (Original) The method of claim 36 wherein maintaining the sealing element under compression after completion of the placement includes the step of exerting pressure on the sealing element through a permanent fluid communication element.

38. (Original) The method of claim 36 wherein maintaining the sealing element under compression after completion of the placement includes the step of confining the sealing element in a volume surrounded by materials of high Young's modulus.

39. (Currently Amended) The method of claim 36, wherein the sealing element comprises a sealing material, ~~which is a liquid or a gel,~~ said sealing material being activated to transform to a solid or yield stress fluid.

40. (Original) The method of claim 39, wherein the activation is triggered by expansion of parts of a well tube crushing encapsulated components of the sealing material, by an external trigger, or by injection of an activator.

41. (Original) The method of claim 36, wherein the sealing element is placed on the outer surface of said well tube.

42. (Currently Amended) The method of ~~one of claims~~ claim 36, wherein the sealing element comprises an inflatable element, said inflatable element being inflated by a sealing material, in a liquid or gel state.

43. (Currently Amended) The method of ~~one of claims~~ claim 36, wherein at least part of the sealing material is placed after placement of the well tube.

44. (Currently Amended) The method of ~~one of the claims~~ claim 36, wherein the sealing material is pumped from the surface through one or more ports in the well tube.

45. (Original) The method of claim 44, wherein the well tube comprises a valve, which is able to open or close said one or more ports.

46. (Currently Amended) The method of ~~one of claims~~ claim 36, wherein the sealing material is pumped from surface into the annulus.

47. (Original) The method of claim 37, wherein the fluid communication element is a control line tube between surface and the sealing element.

48. (Original) The method of claim 36, wherein the sealing element is pumped as part of a fluid train from the surface through a well tubing into the annulus between the well tubing and the formation.

49. (Original) The method of claim 48, wherein the sealing element is placed using a delivery tube introduced into the well tube.

50. (Original) The method of claims 36, wherein the sealing element comprises an inflatable element placed in the annulus, independently of the well tube.

51. (Original) The method of claim 36, wherein the sealing element has an essentially full cylindrical or disk shape to seal the full cross-section of the well.

52. (Original) The method of claim 36, wherein an under-reaming is carried out and the sealing material is placed in the under-reamed section of the well.

53. (Currently Amended) The method or system of claim 1 ~~or 36~~, comprising a plurality of sealing elements.

54. (Currently Amended) Use of the method or the system according to claim 1 ~~or 36~~ for plug and abandonment.

55. (Original) Wellbore fluid comprising crosslinkable polypropylene glycol adapted for injection in the well to cause the formation of a permanent barrier to isolate sections of the wellbore.

56. (Original) The wellbore fluid of claim 55 wherein the polypropylene glycol comprises epoxy goups as terminal groups .

57. (New) The system of claim 7, wherein the stress value of the sealing material is greater than 600 Pa.

58. (New) The system of claim 1, wherein the sealing element is able to deform for more than one month after placement.

59. (New) The method of claim 39 wherein said sealing material is a liquid

60. (New) The method of claim 39 wherein said sealing material is a gel.